Disease Distribution in Syphilis, Gonorrhea and Chlamydia: 2002

In the year 2002, a total of 3,798 cases of chlamydia, gonorrhea and syphilis (all types) were reported among Rhode Island residents. Females were disproportionally affected, with 2,575 cases of STDs compared to 1,223 reported cases in males, resulting in a female:male sex ratio of 2.1. The greatest sex disparity involved chlamydia, with 2,057 female cases and 775 male cases (female:male ratio = 2.7). Males accounted for sixteen of the twenty-one cases (76.2%) of infectious syphilis while females accounted for 64.4% of the late syphilis cases.

While approximately 82% of Rhode Island population is Non-Hispanic White (according to 2000 U.S. Census estimates), only 37% of the STDs reported in 2002 were among this population (1,401 cases of STDs). There were 1,183 cases of STDs in the Hispanic population (31%) and 1,026 cases in the Non-Hispanic Black population (27%). This translates into an STD case rate for Non-Hispanic Whites of 163 cases per 100,000, for Non-Hispanic Blacks, 2,447 cases per 100,000 people, and for Hispanics, 1,303 cases per 100,000 people. The greatest racial/ethnic disparities were seen in reported cases of gonorrhea, where 41% of the cases were among the Non-Hispanic Blacks, while Non-Hispanic Whites accounted for 34% and Hispanics 21%. The gonorrhea case rate for 2002 for Non-Hispanic Blacks was 889.7 per 100,000 people, which was almost 25 times higher than the case rate for Non-Hispanic Whites (35.9 per 100,000 people) and 4.4 times higher than the case rate for Hispanics (203.7 per 100,000 people). Eighteen of the cases of gonorrhea were missing racial/ethnic information. For chlamydia, 38% of the cases were reported in Non-Hispanic Whites (125 cases per 100,000 people), 34% of the cases were reported in Hispanics (1,057 cases per 100,000 people) and 23% of the cases were reported in Non-Hispanic Blacks (1,546 cases per 100,000 people). Thirty-three of the 2,832 chlamydia cases reported in 2002 were missing racial/ethnic information. For late latent syphilis, Hispanics accounted for 67% (30 out of 45) of the cases, while Non-Hispanic Whites accounted for 22% and Non-Hispanic Blacks 7%.

Young adults aged 15-24 were cited in 67% of all STDs reported in Rhode Island in the year 2002. Adults aged 25-34 accounted for 23% of the cases. Geographically, 52% of all STDs in Rhode Island were reported in residents of Providence (49% of chlamydia cases, 52% of gonorrhea cases and 49% of all syphilis cases). The five "core cities", Providence, Central Falls,

Pawtucket, Newport and Woonsocket, Accounted for 73% of all reported STDs in the state in 2002.

Table 1

Disease	Chlamydia	Gonorrhea	Syphilis		
	,		(Primary,	Syphilis*	Syphilis
Characteristics:			Secondary)	(Early Latent)	(All other stages)
Total # of cases	2,832	900	13	9	45
Case rate per 100,000 population					
(based on 2000 estimate of the population)	270.1	85.9	1.2	0.9	4.3
Sex					
Male	775	416	11	6	16
Female	2,057	484	<5	<5	29
Race/Ethnicity					
Non-Hispanic White	1,072	308	8	<5	10
Non-Hispanic Black	648	373	<5	<5	<5
Hispanic (All races)	960	185	<5	<5	30
Asian/Pacific Islander	93	5			<5
American Indian/Alaskan Native	26	11			
Other/Unknown	33	18			
Age (Years)					
< 10	<5	0			
10 – 14	43	17			
15 – 19	904	243	<5	<5	<5
20 - 24	1,107	287	<5	<5	<5
25 – 29	432	172			7
30 – 34	174	76	<5	<5	6
35 – 39	89	44	<5	<5	6
40 - 44	43	37	<5		<5
45 – 54	30	20	<5	<5	10
55 – 64	6	<5			7
65 +	<5	0		<5	
Unknown	<5	<5			

STD Trends: 2001 vs 2002

In 2002, reports of gonorrhea increased significantly over 2001, while reported cases of chlamydia decreased slightly over the same time period. A comparison of reported cases of gonorrhea and chlamydia between 2001 and 2002 is provided in Table 3. Reports of early syphilis included thirteen primary and secondary syphilis and eight early latent cases in 2002. Late syphilis reports increased from twenty-nine reported cases in 2001 to forty-five cases for 2002.

Rhode Island, like many other parts of the country, has seen an increase in the reports of infectious syphilis. Although the increase in numbers is not as dramatic as other regions of the country, it is still significant non the less. There were 22 cases of infectious syphilis statewide in 2002, an increase of 83% over the twelve reported cases in 2001. Perhaps more striking is the 340% increase in infectious syphilis from 2000 to 2002. Sixteen of the twenty-two reported

cases were male and eleven of those sixteen cases were men who have sex with men. Of the latter, six were self reported to be HIV positive. Unlike gonorrhea and chlamydia, where infection is distributed mostly among the 15-24 year old population, the cases of infectious syphilis reported in Rhode Island had an average age of 34 years old. Table 2 provides a brief overview of infectious syphilis in Rhode Island from 2000 to 2002.

Table 2

Infectious Syphilis Cases

Rhode Island 2000 - 2002

	<u>2000</u>		<u> 2001</u>		<u>2002</u>	
	#	Rate*	#	Rate*	#	Rate*
Statewide	5	0.5	12	1.1	21	2.0
Core Cities (Providence, Pawtucket, Central Falls)	<5	0.8	9	3.4	16	6.0
Hispanic Black White	<5 <5 <5	1.1 7.2 0.1	0 <5 10	0 4.8 1.2	8 <5 11	8.8 4.8 1.3

^{*} Rates are expressed as cases/100,000 population. Rates are based on the 2000 Rhode Island population as calculated by the U.S. Bureau of the Census.

The year 2002 marked the fourth year in a row that the number of gonorrhea case in Rhode Island rose. There were 900 cases of gonorrhea reported in 2002 compared to 830 cases in 2001. This corresponds to an 8.4% increase in the number of cases reported to HEALTH from 2001 to 2002. There has been a 109% increase in the reported cases of gonorrhea from 1998, when only 430 cases were reported, to 2002. The statewide incidence of gonorrhea rose from 79 cases per 100,000 in 2001 to 86 cases per 100,000 in 2002.

More cases of gonorrhea were reported in non-hispanic blacks (41.4%) than in any other ethnic/racial group in Rhode Island. When comparing 2002 to 2001, two out of the three major racial/ethnic groups in Rhode Island saw a significant increase in 2002. Non-hispanic whites had the largest percentage of increase (13.2%) followed by non-hispanic blacks (10.4). Hispanics remained for the most part stable with a 1.1% decrease in cases.

Reported cases of gonorrhea were concentrated in Providence County where 798 residents (88.7%) were reported to be infected. The City of Providence reported 469 cases of gonorrhea (52.1%) in 2002. The number of non-hispanic whites infected in the City of Providence decreased 11.5% from 2001 to 2002. In contrast, over the same time period the number of reported non-hispanic blacks infected increased 4.2% while the number of reported hispanics infected remained for the most part stable, with an increase of only 0.8%.

Four hundred eighty-eight cases (54%) of gonorrhea were reported in females and four hundred sixteen cases (46%) in males in 2002. When comparing 2001 to 2002, the number of reported cases of gonorrhea in males increased almost 22%, while the number of cases in females remained relatively stable. More than half of the cases (58.9%) were in their late teens and early twenties. About nine of ten reported cases (88.3%) were less than 35 years of age. Although the numbers are not large, 2002 showed an increase in the reported cases of gonorrhea in the older age groups.

Two thousand eight hundred thirty-two cases of chlamydia were reported in 2002, a decrease of 3.1% when compared to the corresponding period in 2001. Two thousand fifty-seven cases (72.6%) were female and seven hundred seventy-five cases (27.4%) were male. The female:male sex ratio is much less pronounced in minority groups than in non-hispanic whites. The sex ratio was about 1.4:1 among blacks, about 2.5:1 among hispanics and about 4.5:1 among whites.

More than seventy percent of cases (71.0%) were reported in persons in the late teens and early twenties. Ninety-four percent of reported cases were less than thirty-five years of age.

In comparing data from 2002 with 2001, there was a slight increase of 0.7% in the reported cases of chlamydia in the non-hispanic white population, while interestingly, both the hispanic and non-hispanic black population showed a decrease. The number of reported cases of chlamydia in the hispanic population decreased 7.1 percent while the non-hispanic black populations decreased 6.6 percent when compared to 2001.

Reported cases of chlamydia were concentrated in Providence County, home to about half the population of Rhode Island, where 2,475 residents (87.4% of cases) were reported to be infected. One thousand three hundred seventy-six cases (48.6%) were reported in residents of Providence.

Table 3

Trends in STDs in Rhode Island: 2001 VS 2002								
	Chlamydia				Gonorrhea			
	2001	2002	% Change		2001	2002	% Change	
Total # of Cases	2,924	2,832	-3.1		830	900	8.4	
Sex								
Male	718	775	7.9		342	416	21.6	
Female	2,206	2,057	-6.8		488	484	-0.8	
Race/Ethnicity								
Non-Hispanic White	1,065	1,072	0.7		272	308	13.2	
Non-Hispanic Black	694	648	-6.6		338	373	10.4	
Hispanic	1,033	960	-7.1		187	185	-1.1	
Asian/PI	101	93	-7.9		8	5	-37.5	
American Indian	21	26	23.8		8	11	37.5	
Other/Unknown	10	33	230.0		17	18	5.9	
Age								
<10	<5	<5	-33.3		0	0	0	
10-14	58	43	-25.9		16	17	6.3	
15-19	959	904	-5.7		262	243	-7.3	
20-24	1,100	1,107	0.6		277	287	3.6	
25-29	449	432	3.8		138	172	24.6	
30-34	193	174	-9.8		75	76	1.3	
35-39	93	89	-4.3		39	44	12.8	
40-44	35	43	22.9		14	37	164.3	
45-54	24	30	25.0		6	20	233.3	
55-64	<5	6	50.0		<5	<5	0	
65+	<5	<5	0		0	0	0	
Unknown	5	<5	-80.0		0	<5		